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> d his


     (FILE 'HOME' ENTERED AT 19:24:38 ON 17 JUN 1999)

     INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, CABA,
CANCERLIT,
     CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE,
DRUGB,
     DRUGLAUNCH, DRUGMONOG2, DRUGNL, ...' ENTERED AT 19:25:04 ON 17 JUN 1999
               SEA EIMERIA
              ---------
                 1   FILE ADISALERTS
                 1   FILE ADISINSIGHT
              2678   FILE AGRICOLA
                16   FILE AIDSLINE
               110   FILE AQUASCI
               400   FILE BIOBUSINESS
                15   FILE BIOCOMMERCE
              4805   FILE BIOSIS
               137   FILE BIOTECHABS
               137   FILE BIOTECHDS
              7133   FILE CABA
                44   FILE CANCERLIT
              1447   FILE CAPLUS
                33   FILE CEABA
                 4   FILE CIN
                83   FILE CONFSCI
                 2   FILE CROPU
               155   FILE DDFB
                48   FILE DDFU
               341   FILE DGENE
               155   FILE DRUGB
                54   FILE DRUGU
                 7   FILE EMBAL
              1155   FILE EMBASE
                13   FILE FROSTI
                13   FILE FSTA
               782   FILE GENBANK
                 1   FILE HEALSAFE
                98   FILE IFIPAT
               201   FILE JICST-EPLUS
              1103   FILE LIFESCI
              2763   FILE MEDLINE
                 1   FILE NIOSHTIC
                19   FILE NTIS
                17   FILE OCEAN
                 4   FILE PHAR
                 1   FILE PHIC
               106   FILE PHIN
                72   FILE PROMT
              2275   FILE SCISEARCH
               185   FILE TOXLINE
               642   FILE TOXLIT
               583   FILE USPATFULL
               442   FILE WPIDS
               442   FILE WPINDEX
L1               QUE EIMERIA
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                   SEA L1 [redacted] TRITON
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                  6    FILE BIOSIS
                  1    FILE BIOTECHABS
                  1    FILE BIOTECHDS
                  5    FILE CABA
                  6    FILE CAPLUS
                  2    FILE EMBASE
                  4    FILE LIFESCI
                  5    FILE MEDLINE
                  4    FILE SCISEARCH
                 56    FILE USPATFULL
                  1    FILE WPIDS
                  1    FILE WPINDEX
L2                 QUE L1 AND TRITON
                  ---------

     FILE 'USPATFULL, BIOSIS, CAPLUS, CABA, MEDLINE, LIFESCI, SCISEARCH,
     EMBASE, BIOTECHDS' ENTERED AT 19:29:12 ON 17 JUN 1999
L3              89 S L2
L4              66 DUP REM L3 (23 DUPLICATES REMOVED)
L5              33 S L4 AND ADJUVANT
L6              29 S L5 AND VACCINE
L7              22 S L6 AND CARRIER
L8              12 S L7 AND SPOROZOITE?
L9               4 S L8 AND HYDROPHILIC
                  E VERMEULEN, ARNO/IN
                  E VERMEULEN, ARNO/AU
                  E CLERCX-BREED, DOMINIQUE/AU
                  E CLERCX-BREED, DOMINIQUE/IN

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(FILE 'USPAT' ENTERED AT 18:55:57 ON 17 JUN 1999)

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L1          583 S EIMERIA
L2           54 S L1 AND SPOROZOITE
L3           44 S L2 AND PROTEIN
L4            6 S L3 AND HYDROPHILIC
L5            6 S L4
L6            4 S L5 AND TRITON
                E VERMEULEN, ARNO/IN
L7           16 S E2-E6
L8            4 S L6 AND L7
                E CLERCX-BREED, DOMINIQUE/IN
L9            4 S L8 AND ADJUVANT
L10           4 S L9 AND VACCINE
L11           4 S L10 AND QUIL A
L12           0 S L11 AND LABEL
L13           4 S L11 AND IMMUNOL?
L14           0 S L13 AND CARIER
L15           4 S L13 AND CARRIER
```

=> d 1-4 ti

US PAT NO: 5,792,644 [IMAGE AVAILABLE] L15: 1 of 4
TITLE: DNA encoding an **Eimeria** 200 kd antigen

US PAT NO: 5,789,233 [IMAGE AVAILABLE] L15: 2 of 4
TITLE: DNA encoding an Eimekia 50 KD antigen

US PAT NO: 5,780,289 [IMAGE AVAILABLE] L15: 3 of 4
TITLE: Coccidiosis poultry **vaccine** DNA encoding an elmeria 20K antigen

US PAT NO: 5,670,362 [IMAGE AVAILABLE] L15: 4 of 4
TITLE: DNA encoding an **Eimeria** 100kD antigen

780,289 [IMAGE AVAILABLE] Jul. 14, 1998 L6: 3 of 4

Coccidiosis poultry vaccine DNA encoding an elmeria 20K antigen

INVENTOR: Arnoldus Nicolaas Vermeulen, HH Cuijk, Netherlands
Paul van den Boogaart, SC Oss, Netherlands
Jacobus Johannus Kok, DH Nijmegen, Netherlands

ASSIGNEE: Akzo Nobel N.V., Arnhem, Netherlands (foreign corp.)

APPL-NO: 08/468,855

DATE FILED: Jun. 6, 1995

REL-US-DATA: Division of Ser. No. 310,357, Sep. 21, 1994, which is a continuation of Ser. No. 102,865, Aug. 6, 1993, abandoned, which is a continuation of Ser. No. 904,075, Jun. 18, 1992, abandoned.

FRN-PRIOR: European Patent Office91.201.523.7. Jun. 18, 1991

INT-CL: [6] C12N 5/10; C12N 1/21; C12N 15/30; C12N 15/63

US-CL-ISSUED: 435/240.1, 69.3, 240.2, 240.4, 252.3, 320.1, 23.5, 23.7

US-CL-CURRENT: 435/325, 69.3, 252.3, 320.1, 348, 362, 367, 419; 536/23.5, 23.7

SEARCH-FLD: 536/23.5, 23.7; 435/69.3, 252.3, 320.1, 240.1, 240.2, 240.4

REF-CITED:

U.S. PATENT DOCUMENTS

4,554,101	11/1985	Hopp	
4,639,372	1/1987	Murray et al.	
4,710,377	12/1987	Schenkel et al.	
4,874,705	10/1989	Andrews et al.	
4,879,213	11/1989	Fox et al.	435/5
5,028,694	7/1991	Mewman et al.	
5,273,901	12/1993	Jacobson et al.	
5,279,960	1/1994	Anderson et al.	

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L4 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2001 ACS
RN 227621-94-5 REGISTRY
CN **Sorbitan, tri-(9Z)-9-octadecenoate, mixt. with (3.beta.)-cholest-5-en-3-ol, (6E,10E,14E,18E)-2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene, Quil-A and sorbitan mono-(9Z)-octadecenoate poly(oxy-1,2-ethanediyl) derivs. (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl-, (6E,10E,14E,18E)-, mixt. contg. (9CI)
CN Cholest-5-en-3-ol (3.beta.)-, mixt. contg. (9CI)
CN **Quil-A, mixt. contg. (9CI)**
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs., mixt. contg. (9CI)
FS STEREOSEARCH
MF C60 H108 O8 . C30 H50 . C27 H46 O . Unspecified . Unspecified
CI MXS
SR CA
LC

L4 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2001 ACS
RN 227621-56-9 REGISTRY
CN **Cholest-5-en-3-ol (3.beta.)-, mixt. with (6E,10E,14E,18E)-2,6,10,15,19,23-hexamethyl-2,6,10,14,18,22-tetracosahexaene, lecithins, Quil-A, sorbitan mono-(9Z)-9-octadecenoate poly(oxy-1,2-ethanediyl) derivs. and sorbitan tri-(9Z)-9-octadecenoate (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl-, (6E,10E,14E,18E)-, mixt. contg. (9CI)
CN **Quil-A, mixt. contg. (9CI)**
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs., mixt. contg. (9CI)
CN Sorbitan, tri-(9Z)-9-octadecenoate, mixt. contg. (9CI)
MF C60 H108 O8 . C30 H50 . C27 H46 O . Unspecified . Unspecified . Unspecified
CI MXS, MAN
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

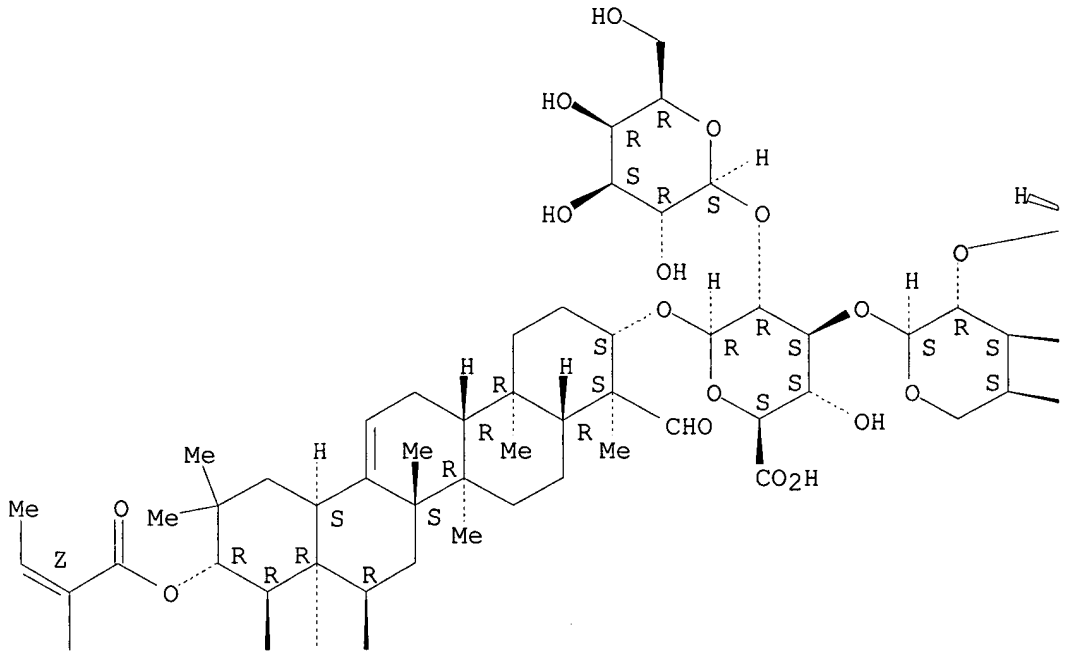
L4 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2001 ACS
RN 66594-14-7 REGISTRY
CN **Quil-A (9CI)** (CA INDEX NAME)
OTHER NAMES:
CN Iscotec AB
CN Spikoside
MF Unspecified
CI COM, MAN
LC STN Files: AGRICOLA, AIDSLINE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CEN, CHEMLIST, CIN, EMBASE, IPA, MEDLINE, PROMT, RTECS*, TOXLINE, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
141 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
141 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L5 ANSWER 3 OF 1130 REGISTRY COPYRIGHT 2001 ACS
RN 316157-17-2 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
OTHER NAMES:
CN **Assamsaponin H**
FS STEREOSEARCH
MF C60 H92 O28
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

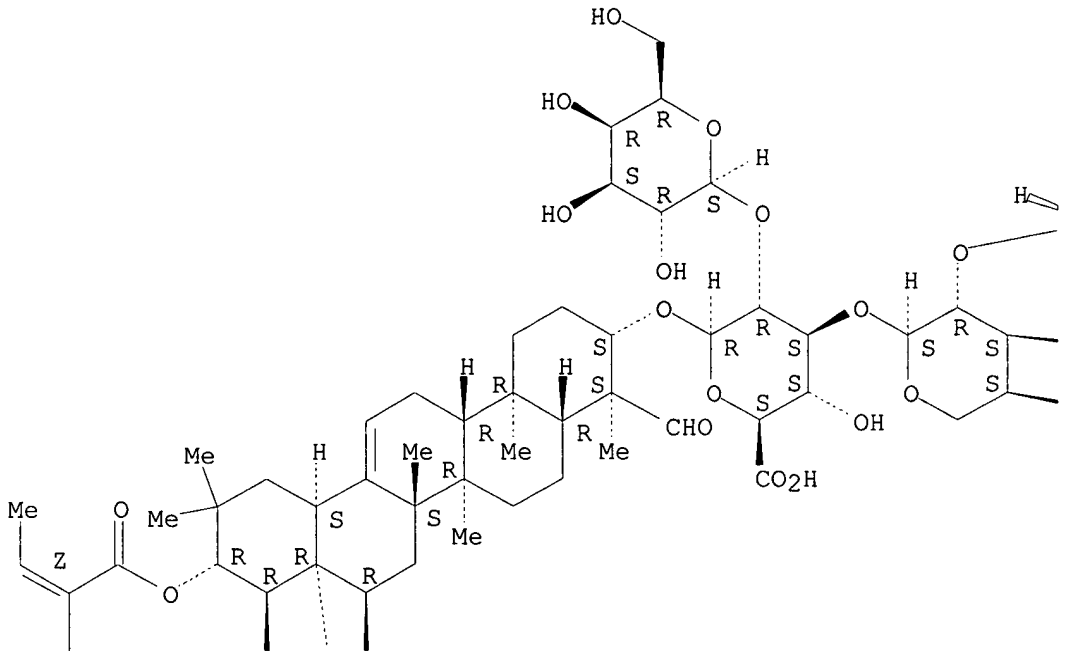
PAGE 1-A



L5 ANSWER 4 OF 1130 REGISTRY COPYRIGHT 2001 ACS
RN 316157-16-1 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
OTHER NAMES:
CN **Assamsaponin G**
FS STEREOSEARCH
MF C60 H92 O28
SR CA
LC STN Files: CA, CAPLUS

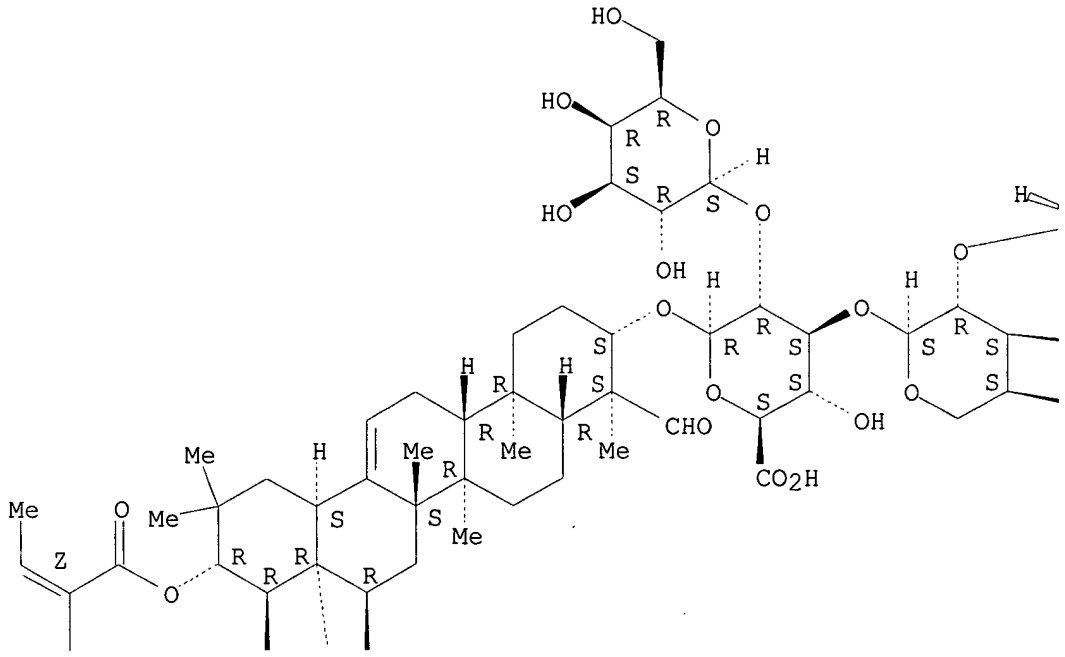
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

PAGE 1-A



L5 ANSWER 5 OF 1130 REGISTRY COPYRIGHT 2001 ACS
RN 316157-15-0 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
OTHER NAMES:
CN **Assamsaponin F**
FS STEREOSEARCH
MF C62 H94 O29
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



L2 ANSWER 1 OF 16 USPATFULL
AN 1999:137454 USPATFULL
TI Parasitic helminth P39 proteins, and uses thereof
IN Grieve, Robert B., Windsor, CO, United States
Frank, Glenn R., Wellington, CO, United States
Mika-Grieve, Marcia, Windsor, CO, United States
Tripp, Cynthia Ann, Ft. Collins, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
Colorado State University Research Foundation, Ft. Collins, CO, United States (U.S. corporation)
PI US 5977306 19991102
AI US 1995-487031 19950606 (8)
RLI Continuation-in-part of Ser. No. US 1993-3389, filed on 12 Jan 1993, now
abandoned And a continuation-in-part of Ser. No. US 1993-101283, filed on 3 Aug 1993, now abandoned And a continuation-in-part of Ser. No. WO 1994-US679, filed on 12 Jan 1994 which is a continuation-in-part of Ser.
No. US 193389 Ser. No. Ser. No. US 1993-3257, filed on 12 Jan 1993, now abandoned And Ser. No. US 1993-109391, filed on 19 Aug 1993, now patented, Pat. No. US 5639876 , said Ser. No. US 193389 which is a continuation-in-part of Ser. No. US 1991-654226, filed on 12 Feb 1991, now abandoned , said Ser. No. US 19101283 which is a continuation of Ser. No. US 19654226
DT Utility
EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Masood, Khalid
LREP Sheridan Ross P.C.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 16 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3776
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to parasitic helminth proteins of about 39
kD (i.e., P39 proteins); to parasitic helminth P39 nucleic acid molecules, including those that encode such proteins; and to antibodies raised against such proteins. The present invention also includes methods to obtain such proteins, nucleic acid molecules, and antibodies.
Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, and/or antibodies as well as the use of such therapeutic compositions to protect animals from
diseases caused by parasitic helminths.

L2 ANSWER 2 OF 16 USPATFULL
AN 1999:81539 USPATFULL
TI Viral vector vaccines comprising nucleic acids encoding **eimeria** proteins for poultry vaccination against coccidiosis
IN Vermeulen, Arnoldus Nicolaas, Cuijk, Netherlands
Boogaart, Paul van den, Oss, Netherlands
Kok, Jacobus Johannus, Nijmegen, Netherlands
PA Akzo Nobel, N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5925347 19990720
AI US 1995-468857 19950606 (8)
RLI Division of Ser. No. US 1994-310357, filed on 21 Sep 1994, now abandoned
which is a continuation of Ser. No. US 1993-102865, filed on 6 Aug 1993,

now abandoned which is a continuation of Ser. No. US 1992-904075, filed on 18 Jun 1992, now abandoned
PRAI EP 1991-201523 19910618
DT Utility
EXNAM Primary Examiner: Crouch, Deborah
LREP Gormley, Mary E.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 2115
AB The invention is concerned with novel **Eimeria** proteins with immunogenic properties as well as with DNA sequences encoding these proteins. These proteins can be administered to chickens thereby protecting the chickens against coccidiosis. In addition the DNA encoding these proteins can be used for the preparation of a vector vaccine against coccidiosis.

L2 ANSWER 3 OF 16 USPATFULL
AN 1999:1790 USPATFULL
TI PSKH-1 ribozymes
IN Prydz, Hans Peter Blankenborg, Holmen vei 50 K, 0376 Oslo, Norway
Brede, Gaute, Vaekeroevei 30, 0282 Oslo, Norway
PI US 5856463 19990105
AI US 1996-715568 19960918 (8)
PRAI NO 1995-3680 19950918
DT Utility
EXNAM Primary Examiner: LeGuyader, John L.; Assistant Examiner: Larsen, Thomas
G.
LREP Lerner, David, Littenberg, Krumholz & Mentlik
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 949
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a purified full-length cDNA molecule encoding putative serine kinase enzyme (PSKH-1), and the expression of the cDNA in a recombinant host cell to produce substantially purified PSKH-1, per se. Inactivation of PSKH-1 pre-MRNA or PSKH-1 mRNA halts DNA synthesis and cell division. Also disclosed are ribozymes capable of cleaving PSKH-1 pre-mRNA or mRNA and thus deactivating PSKH-1 translation. Ribozymes of the hammerhead and hairpin motifs, and various compositions containing same, are also disclosed. The ribozymes compositions are used in the treatment of mammalian patients suffering from diseases or medical conditions characterized by abnormal cell proliferation or growth such as cancer and various non-malignant diseases or medical conditions such as autoimmune diseases, allograft rejection and atherosclerosis.

L2 ANSWER 4 OF 16 USPATFULL
AN 1998:118847 USPATFULL
TI **Eimeria** tenella polypeptide and vaccine containing same
IN Clarke, Lorraine Elizabeth, Cumnor, United Kingdom
Tomley, Fiona Margaret, Cambridge, United Kingdom
Dijkema, Rein, ML Oss, Netherlands
Vermeulen, Arno, HH Cuyk, Netherlands
PA Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5814320 19980929
AI US 4734688 19950607 (8)
RLI Division of Ser. No. 500162, filed on 27 Mar 1990, now patented, Pat.
No. 5677438
PRAI EP 89303032 19890328
DT Utility
EXNAM Primary Examiner: Sidberry, Hazel F.
LREP Gormley, Mary E.
CLMN Number of Claims: 5

ECL Exemplary Claim: 1
DRWN 19 Drawing Figure(s); 17 Drawing Page(s)
LN.CNT 930
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is concerned with a protein having the immunological properties of **Eimeria** tenella which is reactive with a monoclonal antibody E. TEN 11P-2 raised against E. tenella sporozoites.

The invention also relates to polypeptide fragments of this protein which can be used for immunization against E. tenella. These proteins and polypeptides can be prepared by isolation from E. tenella, by chemical synthesis or by recombinant DNA methods using the polynucleotides described herein or related sequences.

L2 ANSWER 5 OF 16 CAPLUS COPYRIGHT 1999 ACS
AN 1998:708701 CAPLUS
DN 129:314968
TI **Eimeria** proteins from Triton X-114 extract as coccidiosis vaccines and immunological reagents
IN Vermeulen, Arno N.; Clercx-Breed, Dominique G. j.
PA Akzo Nobel N.V., Neth.
SO Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 872486	A1	19981021	EP 1998-201097	19980407
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	ZA 9802763	A	19981005	ZA 1998-2763	19980401
	CA 2234472	AA	19981009	CA 1998-2234472	19980408
	AU 9860754	A1	19981015	AU 1998-60754	19980408
	JP 10298104	A2	19981110	JP 1998-97400	19980409
PRAI	EP 1997-302447		19970409		

AB Compns. comprising **Eimeria** proteins or variants/fragments of such proteins can be used to produce a coccidiosis vaccine or immunol. reagent. The proteins are present in the **hydrophilic** phase of a Triton X-114 ext. of **Eimeria** sporozoites and have mol. masses of **26-30** .+-. 5 kDa when detd. by **SDS** **PAGE** under **reducing** conditions. Nine **hydrophilic** fractions of sporozoite proteins from E. tenella, sepd. according to different mol. wt., were tested for their ability to stimulate T-cell responses in PBL from day 8 p.i. in chickens. Although all vaccine prepns. induced strong T-cell responses, surprisingly only one fraction induced partial protection against oral challenge infection with E. tenella oocysts.

L2 ANSWER 6 OF 16 USPATFULL
AN 1998:162322 USPATFULL
TI Parasitic helminth asparaginase proteins, nucleic acid molecules, and uses thereof
IN Chandrashekar, Ramaswamy, Fort Collins, CO, United States
Tsuji, Naotoshi, Fort Collins, CO, United States
PA Heska Corporation, Fort Collins, CO, United States (U.S. corporation)
Colorado State University Research Foundation, Fort Collins, CO, United States (U.S. corporation)
PI US 5854051 19981229
AI US 1997-929501 19970915 (8)
DT Utility
EXNAM Primary Examiner: Patterson, Jr., Charles L.; Assistant Examiner: Nashed, Nashaat T.
LREP Heska CorporationColorado State University Research Foundation
CLMN Number of Claims: 9

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2723
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to: parasitic helminth asparaginase proteins; parasitic helminth asparaginase nucleic acid molecules, including those that encode such asparaginase proteins; antibodies raised against such asparaginase proteins; and compounds that inhibit parasitic helminth asparaginase activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies and/or inhibitory compounds as well as the use of such therapeutic compositions to protect animals from diseases caused by parasitic helminths.

L2 ANSWER 7 OF 16 USPATFULL
AN 1998:131549 USPATFULL
TI Human monocyte elastase inhibitor antibodies
IN Remold-O'Donnell, Eileen, Brookline, MA, United States
PA Center for Blood Research, Inc., Boston, MA, United States (U.S. corporation)
PI US 5827672 19981027
AI US 1996-662318 19960613 (8)
RLI Continuation of Ser. No. US 1994-315831, filed on 30 Sep 1994, now patented, Pat. No. US 5663299 which is a continuation-in-part of Ser. No. US 1991-755461, filed on 6 Sep 1991, now patented, Pat. No. US 5370991 which is a continuation-in-part of Ser. No. US 1989-314383, filed on 23 Feb 1989, now abandoned
DT Utility
EXNAM Primary Examiner: Eisenschenk, Frank C.; Assistant Examiner: Nolan, Patrick
LREP Wolf, Greenfield & Sacks, PC
CLMN Number of Claims: 10
ECL Exemplary Claim: 1,9
DRWN 31 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 2736
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A new human elastase inhibitor is provided. The human monocyte elastase inhibitor is isolated, purified, characterized at the molecular level and cloned. The human monocyte elastase inhibitor is capable of forming a covalent complex with elastase or Proteinase-3 and is capable of inhibiting elastase.

L2 ANSWER 8 OF 16 USPATFULL
AN 1998:95420 USPATFULL
TI DNA encoding an **Eimeria** 200 kd antigen
IN Vermeulen, Arnoldus Nicolaas, Cuijk, Netherlands
Boogaart, Paul van den, Oss, Netherlands
Kok, Jacobus Johannus, Nijmegen, Netherlands
PA Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5792644 19980811
AI US 1995-468852 19950606 (8)
RLI Division of Ser. No. US 1994-310357, filed on 21 Sep 1994 which is a continuation of Ser. No. US 1993-102865, filed on 6 Aug 1993, now abandoned which is a continuation of Ser. No. US 1992-904075, filed on 18 Jun 1992, now abandoned
PRAI EP 1991-201523 19910618
DT Utility
EXNAM Primary Examiner: Caputa, Anthony C.
LREP Gormley, Mary E.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1,9
DRWN 12 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 1978

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is concerned with novel **Eimeria** proteins with immunogenic properties as well as with DNA sequences encoding these proteins. These proteins can be administered to chickens thereby protecting the chickens against coccidiosis. In addition the DNA encoding these proteins can be used for the preparation of a vector vaccine against coccidiosis.

L2 ANSWER 9 OF 16 USPATFULL
AN 1998:91861 USPATFULL
TI DNA encoding an Eimekia 50 KD antigen
IN Vermeulen, Arnoldus Nicolaas, Cuijk, Netherlands
van den Boogaart, Paul, Oss, Netherlands
Kok, Jacobus Johannus, Nijmegen, Netherlands
PA Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5789233 19980804
AI US 1994-310357 19940921 (8)
RLI Continuation of Ser. No. US 1993-102865, filed on 6 Aug 1993, now abandoned which is a continuation of Ser. No. US 1992-904075, filed on 18 Jun 1992, now abandoned
PRAI EP 1991-201523 19910618
DT Utility
EXNAM Primary Examiner: Caputa, Anthony C.
LREP Gormley, Mary E.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1,13
DRWN 12 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 1973
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is concerned with novel **Eimeria** proteins with immunogenic properties as well as with DNA sequences encoding these proteins. These proteins can be administered to chickens thereby protecting the chickens against coccidiosis. In addition the DNA encoding these proteins can be used for the preparation of a vector vaccine against coccidiosis.

L2 ANSWER 10 OF 16 USPATFULL
AN 1998:82587 USPATFULL
TI Coccidiosis poultry vaccine DNA encoding an elmeria 20K antigen
IN Vermeulen, Arnoldus Nicolaas, HH Cuijk, Netherlands
van den Boogaart, Paul, SC Oss, Netherlands
Kok, Jacobus Johannus, DH Nijmegen, Netherlands
PA Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5780289 19980714
AI US 1995-468855 19950606 (8)
RLI Division of Ser. No. US 1994-310357, filed on 21 Sep 1994 which is a continuation of Ser. No. US 1993-102865, filed on 6 Aug 1993, now abandoned which is a continuation of Ser. No. US 1992-904075, filed on 18 Jun 1992, now abandoned
PRAI EP 1991-201523 19910618
DT Utility
EXNAM Primary Examiner: Caputa, Anthony C.
LREP Gormley, Mary E.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1,9
DRWN 12 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 1964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is concerned with novel **Eimeria** proteins with immunogenic properties as well as with DNA sequences encoding these proteins. These proteins can be administered to chickens thereby protecting the chickens against coccidiosis. In addition the DNA encoding these proteins can be used for the preparation of a vector vaccine against coccidiosis.

L2 ANSWER 11 OF 16 USPATFULL

AN 1998:51474 USPATFULL
TI Filariid nematode cysteine protease proteins
IN Tripp, Cynthia Ann, Ft. Collins, CO, United States
Frank, Glenn R., Ft. Collins, CO, United States
Grieve, Robert B., Windsor, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 5750391 19980512
AI US 1995-463989 19950605 (8)
RLI Continuation of Ser. No. US 1994-249552, filed on 26 May 1994, now abandoned
DT Utility
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Lau, Kawai
LREP Sheridan Ross P.C.
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2683
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to parasite astacin metalloendopeptidase and filariid cysteine protease proteins, nucleic acid molecules having sequences that encode such proteins, antibodies raised against such proteins and compounds that can inhibit the activities of parasite astacin metalloendopeptidases or cysteine proteases. The present invention also includes methods to obtain such nucleic acid molecules, proteins, antibodies and inhibitors. The present invention also includes
therapeutic compositions comprising such nucleic acid molecules, proteins, antibodies and inhibitors as well as their use to protect animals from disease caused by parasites, such as heartworm.

L2 ANSWER 12 OF 16 USPATFULL
AN 97:109749 USPATFULL
TI Filariid cysteine protease genes
IN Tripp, Cynthia Ann, Ft. Collins, CO, United States
Frank, Glenn R., Ft. Collins, CO, United States
Grieve, Robert B., Windsor, CO, United States
PA Heska Corporation, Ft. Collins, CO, United States (U.S. corporation)
PI US 5691186 19971125
AI US 1995-463262 19950605 (8)
RLI Continuation of Ser. No. US 1994-249552, filed on 26 May 1994, now abandoned
DT Utility
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Lau, Kawai
LREP Ross P.C., Sheridan
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2667
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to parasite astacin metalloendopeptidase and filariid cysteine protease proteins, nucleic acid molecules having sequences that encode such proteins, antibodies raised against such proteins and compounds that can inhibit the activities of parasite astacin metalloendopeptidases or cysteine proteases. The present invention also includes methods to obtain such nucleic acid molecules, proteins, antibodies and inhibitors. The present invention also includes
therapeutic compositions comprising such nucleic acid molecules, proteins, antibodies and inhibitors as well as their use to protect animals from disease caused by parasites, such as heartworm.

L2 ANSWER 13 OF 16 USPATFULL
AN 97:106806 USPATFULL
TI Coccidiosis vaccines
IN Binger, Mary-Helen, Hopewell, NJ, United States
Pasamontes, Luis, Trimbach, Switzerland

PA Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)
PI US 5688513 19971118
AI US 1994-257392 19940609 (8)
RLI Division of Ser. No. US 1991-729099, filed on 12 Jul 1991, now patented,
Pat. No. US 5403581
DT Utility
EXNAM Primary Examiner: Sidberry, Hazel F.
LREP Johnston, George W.; Epstein, William H.; Smith, Catherine R.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 52 Drawing Figure(s); 50 Drawing Page(s)
LN.CNT 1827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides an immunogenic polypeptide having the amino acid sequence ##STR1## and fragments thereof, which polypeptides are capable of inducing an immune response against **Eimeria** parasites, and the DNA encoding such polypeptides, as well as recombinant vectors and recombinant viruses containing the said DNA or fragments thereof and transformed microorganisms containing such vectors and viruses and coccidiosis vaccines comprising such polypeptides.

L2 ANSWER 14 OF 16 USPATFULL
AN 97:94369 USPATFULL
TI Coccidiosis vaccine
IN Clarke, Lorraine Elizabeth, Cumnor, United Kingdom
Tomley, Fiona Margaret, Cambridge, United Kingdom
Dijkema, Rein, Oss, Netherlands
Vermeulen, Arno, Cuyk, Netherlands
PA Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5677438 19971014
AI US 1990-500162 19900327 (7)
PRAI EP 1989-303032 19890328
DT Utility
EXNAM Primary Examiner: Sidberry, Hazel F.
LREP Gormley, Mary E.; Blackstone, William M.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 927
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is concerned with a protein having the immunological properties of **Eimeria** tenella which is reactive with a monoclonal antibody E. TEN 11P-2 raised against E. tenella sporozoites.

The invention also relates to polypeptide fragments of this protein which can be used for immunization against E. tenella. These proteins and polypeptides can be prepared by isolation from E. tenella, by chemical synthesis or by recombinant DNA methods using the polynucleotides described herein or related sequences.

L2 ANSWER 15 OF 16 USPATFULL
AN 97:86474 USPATFULL
TI DNA encoding an **Eimeria** 100kD antigen
IN Vermeulen, Arnoldus Nicolaas, Cuijk, Netherlands
van den Boogaart, Paul, Oss, Netherlands
Kok, Jacobus Johannus, Nijmegen, Netherlands
PA Akzo Nobel N.V., Arnhem, Netherlands (non-U.S. corporation)
PI US 5670362 19970923
AI US 1995-468853 19950606 (8)
RLI Division of Ser. No. US 1994-310357, filed on 21 Sep 1994 which is a continuation of Ser. No. US 1993-102865, filed on 6 Aug 1993, now abandoned which is a continuation of Ser. No. US 1992-904075, filed on 18 Jun 1992, now abandoned
PRAI EP 1991-201523 19910618
DT Utility

EXNAM Primary Examiner: Caputa, Anthony C.
LREP Gormley, Mary E.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1,9
DRWN 12 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 1964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is concerned with novel **Eimeria** proteins with immunogenic properties as well as with DNA sequences encoding these proteins. These proteins can be administered to chickens thereby protecting the chickens against coccidiosis. In addition the DNA encoding these proteins can be used for the preparation of a vector vaccine against coccidiosis.

L2 ANSWER 16 OF 16 USPATFULL
AN 95:29388 USPATFULL
TI Coccidiosis vaccines
IN Binger, Mary-Helen, Hopewell, NJ, United States
Pasamontes, Luis, Trimbach, Switzerland
PA Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)
PI US 5403581 19950404
AI US 1991-729099 19910712 (7)
DT Utility
EXNAM Primary Examiner: Sidberry, Hazel F.
LREP Gould, George M.; Epstein, William H.; Roseman, Catherine R.
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 52 Drawing Figure(s); 50 Drawing Page(s)
LN.CNT 1824
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides an immunogenic polypeptide having the amino acid sequence ##STR1## which polypeptides are capable of inducing an immune response against **Eimeria** parasites, and the DNA encoding such polypeptides, as well as recombinant vectors and recombinant viruses containing the said DNA and transformed microorganisms containing such vectors and viruses and coccidiosis vaccines comprising such polypeptides.

L1 ANSWER 2 OF 6 MEDLINE
AN 94120693 MEDLINE
DN 94120693 PubMed ID: 8291209
TI Protective oral immunization of chickens against **Eimeria** tenella with sporozoite surface antigens.
AU Rhalem A; Sahibi H; Dakkak A; Laurent F; Kazanji M; Yvore P; Pery P
CS Institut Agronomique et Veterinaire Hassan II, Rabat, Morocco.
SO VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, (1993 Oct) 38 (3-4) 327-40. Journal code: XCB; 8002006. ISSN: 0165-2427.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199402
ED Entered STN: 19940312
Last Updated on STN: 19970203
Entered Medline: 19940222
AB Antigens were extracted from the surface of **Eimeria** tenella sporozoites with a solution containing **Triton** X 100 (1%), sodium dodecyl sulphate (0.5%) Na deoxycholate (1%) and EDTA (1 mM). After removal of the detergents, these surface antigen preparations conferred an immunity that protected chickens against a subsequent infection (10(4) sporulated oocysts). The best results were obtained after two 250 micrograms injections of Al(OH)3 adsorbed antigens (oocyst output per g caecal material on Day 7 post infection: 2.39 x 10(7) +/- 0.32 x 10(7) oocysts for controls and 7.37 +/- 10(6) +/- 3.19 x 10(6) oocysts for vaccinated birds) and after four gastric intubations of liposome entrapped antigens (oocysts output on Day 7 postinfection: 2.75 x 10(6) +/- 2.02 x 10(6) g-1 caecal material). These results represented respectively 70 and 88% protection indexes. Studies on the systemic and local antibody response after one or several infections of chickens with the parasite indicated at least 20 different molecules in the detergent antigens which are classified after immunoblotting according to their properties.

L1 ANSWER 3 OF 6 MEDLINE
AN 92333104 MEDLINE
DN 92333104 PubMed ID: 1629609
TI In situ immunocytochemical detection of cells containing antibodies specific for **Eimeria** tenella antigens.
AU Vervelde L; Vermeulen A N; Jeurissen S H
CS Central Veterinary Institute, Department of Virology, Lelystad, Netherlands.
SO JOURNAL OF IMMUNOLOGICAL METHODS, (1992 Jul 6) 151 (1-2) 191-9. Journal code: IFE; 1305440. ISSN: 0022-1759.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199208
ED Entered STN: 19920904
Last Updated on STN: 19920904
Entered Medline: 19920817
AB A three-step immunocytochemical method for the in situ detection of antibodies specific for **Eimeria** tenella has been developed. The method is based on the binding of E. tenella antigens to antibodies in cryostat sections of chicken tissues and the recognition of these antigens

by rabbit antiserum specific for E. tenella or mouse monoclonal antibodies
specific for E. tenella. The rabbit antiserum and mouse monoclonal antibodies were revealed by the immunoperoxidase technique. Suspensions of
sonicated sporulated oocysts, incubated with or without various concentrations of the non-ionic detergents **Triton** X-100 (TX-100) or Nonidet P-40 (NP-40), were used as antigen. Cells containing antibodies
specific for E. tenella were detected only when detergent extracts of sonicated sporulated oocysts were used. After chickens were intravenously immunized with a suspension of sonicated sporulated oocyst antigen, cells containing antibodies specific for E. tenella antigens were detected in the red pulp of the spleen. After simultaneous immunoenzyme staining for isotype and antigen specificity, the E. tenella-specific antibody-containing cells were of the IgM isotype after the primary immunization and of the IgM and IgG isotype after the booster immunization. Immune complexes specific for E. tenella on the surfaces of follicular dendritic cells in the germinal centers were also stained. Chickens were also orally infected with sporulated oocysts. In these experiments, cells containing antibodies specific for E. tenella were detected in the lamina propria of the ceca and in the red pulp of the spleen. Specific immune complexes were also detected in the germinal centers of the cecal tonsils. When detergent extracts of sonicated sporulated oocysts were characterized by immunoblotting, rabbit antiserum specific for E. tenella reacted with proteins ranging in size from 16 kDa to 200 kDa, with major bands of 20 kDa, 24 kDa, 45 kDa, and 100 kDa. Monoclonal antibodies specific for E. tenella recognized only proteins of low molecular weight (20 kDa and 24 kDa) or high molecular weight (80-100 kDa). Immune chicken serum reacted with proteins of low and high molecular
weight but especially with proteins of 100 kDa and 113 kDa. This method is
the first by which immune complexes and cells containing antibodies specific for parasitic antigens can be detected in situ and may be of value for studies of the local humoral immune response to E. tenella in the mucosa of chickens.

L1 ANSWER 4 OF 6 MEDLINE
AN 91202438 MEDLINE
DN 91202438 PubMed ID: 2128339
TI Identification of an apically-located antigen that is conserved in sporozoan parasites.
AU Taylor D W; Evans C B; Aley S B; Barta J R; Danforth H D
CS Department of Biology, Georgetown University, Washington, D.C.
NC RO1 AI 20917 (NIAID)
SO JOURNAL OF PROTOZOOLOGY, (1990 Nov-Dec) 37 (6) 540-5.
Journal code: JT3; 2985197R. ISSN: 0022-3921.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199105
ED Entered STN: 19910607
Last Updated on STN: 19910607
Entered Medline: 19910523
AB Sporozoan parasites of the phylum Apicomplexa all possess common apical structures. The current study used a monoclonal antibody (mAb-E12) to identify a conserved antigen in the apical region of merozoites of seven species of Plasmodium (including rodent, primate and human pathogens),

tachyzoites of Toxoplasma gondii, bradyzoites of Sarcocystis bovis, and sporozoites and merozoites of **Eimeria** tenella and E. acervulina. The antigen was also present in sporozoites of haemosporinid parasites. Immunofluorescence studies showed that the antigen was restricted to the apical 3rd of these invasive stages. Using immunoelectron microscopy, labeling was demonstrated in the region of the polar ring, below the paired inner membranes of the parasite pellicle, and near the subpellicular microtubules radiating from the polar ring of merozoites and sporozoites of E. tenella. The majority of the antigen could be extracted with 1% **Triton**-X 100, but a portion remained associated with the cytoskeletal elements. The molecule has a relative rate of migration (Mr) of 47,000 in Plasmodium spp. and 43-46,000 in coccidian species. Since the epitope recognized by mAb-E12 is highly conserved, restricted to motile stages, and appears to be associated with microtubules, this antigen could be involved in cellular motility and cellular invasion.

L1 ANSWER 5 OF 6 MEDLINE
AN 89258543 MEDLINE
DN 89258543 PubMed ID: 2724179
TI Changes in the cytoplasmic elements of cultured cells infected with **Eimeria** vermiformis sporozoites.
AU Adams J H; Bushell G R
CS Department of Parasitology, University of Queensland, St. Lucia, Brisbane, Australia.
SO JOURNAL OF PROTOZOOLOGY, (1989 Mar-Apr) 36 (2) 133-8.
Journal code: JT3; 2985197R. ISSN: 0022-3921.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198907
ED Entered STN: 19900306
Last Updated on STN: 19900306
Entered Medline: 19890711
AB Epithelial-type (PK-15) and fibroblast-type (MDBK) mammalian cell cultures were inoculated with purified **Eimeria** vermiformis sporozoites. Matched samples from 0 to 93 h after inoculation (HAI) were processed for electron microscopy; half of the sample preparations were extracted with non-ionic detergent prior to fixation. Specimens were examined by both transmission and scanning electron microscopy. Numerous sporozoites were attached to the cultured cells from 2 to 93 HAI, usually near the cell periphery. Some host cell microvilli extended up and appeared attached to the sporozoites. Sporozoites fixed during the penetration process were markedly constricted at the site of entry; however, no noticeable changes occurred in the host cell membrane or surface microvilli during sporozoite invasion or in sporozoite-infected cells. In cells extracted with 1% **Triton** X-100, the host cytoskeleton was progressively reorganized about the parasites but changes were limited to the immediate area of the sporozoite. Around resident sporozoites, the cytoskeleton became less dense but also more ordered, which contrasted with adjacent cell areas. Cytoskeletal elements passed both over and under the parasites. The appearance of the cytoskeleton suggested that the host cell formed a loose, basket-like net of cytoskeletal elements about the parasite.

L1 ANSWER 6 OF 6 MEDLINE
AN 87039218 MEDLINE
DN 87039218 PubMed ID: 3534564
TI Identification of the sporozoite antigens of **Eimeria** tenella.
AU Wisher M H
SO MOLECULAR AND BIOCHEMICAL PARASITOLOGY, (1986 Oct) 21 (1) 7-15.
Journal code: NOR; 8006324. ISSN: 0166-6851.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198612
ED Entered STN: 19900302
Last Updated on STN: 19900302
Entered Medline: 19861211
AB The surface membranes of **Eimeria** tenella sporozoites were labelled with 125I and polypeptides resolved by polyacrylamide gel electrophoresis in sodium dodecyl sulphate (SDS-PAGE). The most heavily labelled polypeptides were 47, 26, 21 and less than or equal to 18 kDa but significant amounts of 125I were incorporated into a number of polypeptides with molecular weights ranging from greater than 200 000 to less than 18 000. Similar 125I-polypeptide profiles were observed after the surface labelling of sporozoites of E. acervulina, E. maxima and E. nieschulzi. Sporozoites of E. tenella were also radiolabelled by incubation in medium containing [35S]methionine and SDS-PAGE resolved more than 35 radiolabelled polypeptides with molecular weights from greater than 200 000 to less than 18 000. 125I and 35S-labelled sporozoites of E. tenella were solubilised in the detergents **Triton** X-100 or sodium deoxycholate and immunoprecipitated with serum from chickens immunized by infection with this species. Polypeptides of unlabelled E. tenella sporozoites, resolved by SDS-PAGE, were blotted onto nitrocellulose and the antigens, which reacted with the chicken serum, identified by immunoperoxidase staining. There was some variation between different sporozoite preparations in the number and molecular weights of antigens identified by these techniques but, consistently, the major surface polypeptides that were specifically immunoprecipitated were 104, 47 and 43 kDa. Specifically immunoprecipitated 35S-labelled antigens were of 123-94 kDa, 54-42 kDa and 32-25 kDa and antigens detected on Western blots were within the following ranges: 113-96 kDa, 73-67 kDa, 54-42 kDa, 37-32 kDa and 18-14 kDa.

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